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Use of polycationic quaternised products as dye fixers in
detergents or rinses - with products being made by condensation of
piperazine(s) or imidazole(s) with halogen compounds or bis-epoxide(s) or
by self-condensation of e.g. tri-ethanolamine

Patent Assignee: BASF AG (BADI)

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Patent Family:

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DE 19643281	A1	19980423	DE 1043281	A	19961021	199822 B
WO 9817762	A1	19980430	WO 97EP5606	A	19971010	199823
EP 934382	A1	19990811	EP 97911213	A	19971010	199936
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US 20020045563	A1			C11D-003/37	Div ex application US 99284479
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US 6465415	B2			C11D-003/37	Div ex application WO 97EP5606

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Abstract (Basic): DE 19643281 A

Use is claimed in detergents or post-wash compositions as polycationic dye transfer inhibitors and dye dissolution-reducing additives of compounds which have been quaternised with 4-25C alkylating agents after having been obtained by either: (A) condensing (i) 1 mol. of piperazine, a 1-25C alkyl- or di-1-25C 1,4-alkyl-piperazine, 1,4-bis-(3-aminopropyl)-piperazine, 1-(2-aminoethyl)-piperazine, 1-(2-hydroxy-(2-25C) alkyl)-piperazine, imidazole and/or 1-25C alkyl-imidazole with (ii) 0.8-1.1 mols. of an alkylene dihalide, epihalohydrin or bis-epoxide; or (B) heating triethanolamine or triisopropanolamine in presence of acid catalysts.

Also claimed are: (a) detergent containing (by wt.) 1-50% nonionic surfactant, 0-4% anionic surfactant and 0.05-2.5% of the above quaternised product; and (b) a post-wash composition containing 1-50% soft rinser, 1-50% nonionic surfactant and 0.1-2.5% of the above quaternised product.

Preferably component (A)(i) is piperazine, 1-(2-hydroxy- (or amino-)ethyl)-piperazine, imidazole and/or 1-3C alkyl imidazole and (A)(ii) is 1,2-dichloro-ethane or -propane, 1,3-dichloropropane, 1,4-dichlorobutane, epichlorhydrin and/or bis-epoxybutane.

ADVANTAGE - Products known from EP209787 and EP223064 for use in improving the fastness of reactive dyes are used in detergents and rinsing compositions to prevent both dissolution and transfer of dyes from fabrics.

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Derwent Class: A26; A97; D25

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